

Time: 3 hours

- N.B.: 1. All questions are compulsory
 2. Figures to the right indicates full marks
 3. Draw neat and labelled diagram wherever necessary

Total Marks 70

- Q1. A) Answer the following 12
- i. Define "Cardiac Output"
 - ii. What are the causes of arrhythmia?
 - iii. What is net filtration pressure?
 - iv. Enlist various fluid compartments in the body?
 - v. Define process of deglutition?
 - vi. Define composition and functions of gastric juice?
- B) Fill in the Blanks 3
- i. The _____ is the heart's natural pacemaker.
 - ii. The main function of loop of Henle is to
 - iii. The villi and the microvilli increase
- Q2. A) Answer ANY TWO of the following 8
- i. Draw a neat and labelled diagram of section of testis.
 - ii. Write a note on process of oogenesis.
 - iii. Enlist male and female hormones and discuss their functions.
- Q2. B) Answer ANY ONE of the following 3
- i. Write a note on male infertility.
 - ii. Discuss pathophysiology of Dysmenorrhea.
- Q3. A) Answer ANY TWO of the following 8
- i. Draw a neat and labelled diagram showing internal anatomy of heart.
 - ii. Discuss conduction system of the heart.
 - iii. Write a note on regulation of blood pressure.
- Q3. B) Answer ANY ONE of the following 3
- i. What is angina pectoris? Discuss its pathophysiology
 - ii. Write a note on congestive heart failure.
- Q4. A) Answer ANY TWO of the following 8
- i. Draw neat and labelled diagram showing internal structure of kidney .
 - ii. Discuss structure and function of the nephron.
 - iii. Discuss mechanism of water balance in the body.

- Q4. B) Answer **ANY ONE** of the following 3
- i. Write a note on digestion of carbohydrates.
 - ii. Discuss structure and functions of large intestine.
- Q5. A) Answer **ANY TWO** of the following 8
- i. Discuss anatomy and physiology of stomach.
 - ii. Write a note on digestion of lipids across the G. I. tract.
 - iii. Discuss anatomy and functions of pancreas.
- Q5. B) Answer **ANY ONE** of the following 3
- i. Write a note on Ulcerative colitis.
 - ii. Discuss pathophysiology of Jaundice.
- Q6. A) Answer **ANY TWO** of the following 8
- i. Discuss pathophysiology of Atherosclerosis.
 - ii. Write a note on anatomy of arteries.
 - iii. Describe the process of defecation.
- Q6. B) Answer **ANY ONE** of the following 3
- i. Write a note on coronary circulation.
 - ii. Discuss functioning of atrioventricular valves
